Sudhir Yarram

Email: sudhirya@buffalo.edu Webpage: http://skrya.github.io

RESEARCH Interests My research focuses on designing video perception and forecasting models for autonomous systems that will enable autonomous systems to *perceive* and *forecast* in the real world just as humans are able, and ultimately surpass humans ability to forecast.

EDUCATION

University at Buffalo, USA

Doctor of Philosophy, Computer Science and Engineering Aug 2019 - present

Advisor: Prof. Junsong Yuan

Thesis Committee: Prof. Junsong Yuan, Prof. Chunming Qiao, Prof. Vishnu Lokhande

International Institute of Information Technology, Hyderabad India

Bachelor of Technology, Computer Science and Engineering,

Jul 2011 - Jul 2015

GPA: 8.08/10 (Overall)

SELECTED WORK EXPERIENCE Amazon Go Team

Research Intern, with Dr. Tian Lan, Dr. Hui Liang, and David Acuna Summer 2021

Referring Video Object Segmentation

Seattle, WA, USA

Amazon Go Team

Applied Scientist Intern, with Dr. Tian Lan and Dr. Hui Liang Domain Adaptation for Referring Video Object Segmentation Summer 2020 Seattle, WA, USA

Adobe Systems

Member of Technical Staff, with Vikas Jain

2016 - 2018

Owner of the Predictive Creativity app, an animation app that simplifies the repetitive process using machine learning algorithms.

Bangalore, India

Publications

Sudhir Yarram, Junsong Yuan, "Forecasting Future Videos from Novel Views via Disentangled 3D Scene Representation", in *European Conference on Computer Vision* (ECCV), 2024. (In submission)

Sudhir Yarram, Ming Yang, Junsong Yuan, "Adversarial Structured Prediction for Domain Adaptive Semantic Segmentation", in *Machine Vision and Applications* (MVA), 2022. [pdf]

Jialian Wu, Sudhir Yarram, Hui Liang, Tian Lan, Junsong Yuan, Jayan Eledath, and Gerard Medioni, "Efficient Video Instance Segmentation via Tracklet Query and Proposal", in *IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2022. [pdf]

Sudhir Yarram, Jialian Wu, Pan Ji, Yi Xu, Junsong Yuan, "Deformable VisTR: Spatio temporal deformable attention for video instance segmentation", in *IEEE International Conference on Acoustics, Speech and Signal Processing* (ICASSP), 2022. [pdf]

Sudhir Yarram, Ming Yang, Junsong Yuan, Chunming Qiao, "Joint Global-Local alignment for domain adaptive semantic segmentation", in *IEEE International Conference on Acoustics*, Speech and Signal Processing (ICASSP), 2022. [pdf]

Ashutosh Mishra*, **Sudhir Yarram***, Tarun Kalluri*, Manmohan Chadraker, C.V.Jawahar, "Semantic Segmentation Datasets for Resource Constrained Training", in *IEEE National Confer-*

ence on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG), 2019. [pdf]

Sudhir Yarram, Girish Varma, C.V. Jawahar "City-scale Road Audit using Deep Learning", in *IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS), 2018. [pdf] *Finalist for IROS JTCF Novel Technology paper award (certificate)*

Awards & Honors

IROS JTCF Novel Technology paper award Runner-up, $\mathbf{IROS},\,2018.$

Nominee for Young Achievers Award, Adobe Systems, 2016.

Secured 534th rank in All India Engineering Examination (AIEEE) 2011 (>150k applicants)

Professional

Conference Reviewing

SERVICES Computer Vision and Pattern Recognition Conference

2020 - 2023 2021, 2023

International conference on computer vision European Conference on Computer Vision

2022, 2024

Journal Reviewing

SKILLS

Python, C, C++, PyTorch